Faculty Scholarship

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Techno-Policing

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In July 2017, the *New York Times* reported that Three Square Market, a Wisconsin-based technology company, was asking its employees to have a microchip "the size of a grain of rice injected between their thumb and index finger."[1] Responding to privacy concerns raised by the media, the Chief Executive Officer of Three Square Market made clear that the chip is simply a reader like a swipe card. With an implanted microchip, "any task involving RFID technology—swiping into the office building, paying for food in the cafeteria—can be accomplished with a wave of the hand."[2] He added, "Your cellphone does 100 times more reporting of data than does an RFID chip."[3] Apparently, these assurances were sufficient for Three Square Market's employees, more than half of whom consented to the implant.[4] As one employee put it, "In the next five to 10 years, this is going to be something that isn't scoffed at so much, or is more normal. So I like to jump on the bandwagon with these kind of things early, just to say that I have it."[5]

This story piqued my interest for several reasons, not the least of them being a little bit of chagrin about the burgeoning number of swipe cards in my wallet, including one to enter the law school where I teach. But mostly, as someone who has been thinking about criminal justice and new technologies, I was interested in what the implanting of microchips might portend for criminal justice issues. We have long photographed and fingerprinted arrestees, allowing us to trace them in perpetuity. And in *Maryland v. King*, with little hand-wringing, the Court ruled that allowing the government to also collect DNA was no different, and thus constituted a reasonable search under the Fourth Amendment.[6] Might we one day implant chips in convicted felons,[7] or arrestees, under a similar rationale? Or if not

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[1]   Maggie Astor, *Microchip Implants for Employees? One Company Says Yes*, N.Y. TIMES (July 25, 2017), https://www.nytimes.com/2017/07/25/technology/microchips-wisconsin-company-employees.html. [https://perma.cc/W5YS-8UXL].

[2]   *Id.*

[3]   *Id.*

[4]   *Id.*

[5]   *Id.*

[6]   569 U.S. 435, 465–66 (2013). Although the Court stated that the government's interest was simply to identify the arrestee. *Id.* at 436.

[7]   All 50 states already collect DNA from convicted felons. *Id.* at 444–45.

all arrestees, perhaps those released on bail? Indeed, at a time when many scholars and legislators are rethinking bail,[8] might the availability of removable chips—currently, the cost is about $300 per chip, and one can easily imagine the cost decreasing with mass production—strengthen the argument *against* pretrial detention?

The speculation—like speculative fiction, which is also specular—does not stop here. What are the implications for sentencing, especially algorithmic risk-based sentencing? Or perhaps a closer fit, what are the implications for releasing defendants who have completed their sentences and are eligible for parole? At a time when the Court has given its blessing to civil commitment for sex offenders,[9] and when sex offender registries have become the new normal, how might the availability of microchips to monitor the coming and going of individuals—like a wireless fence—change the analysis? Finally, and perhaps most central to this essay, what are the possibilities when we couple the availability of microchips with access to Big Data?

I come to these questions not as someone who laments the loss of privacy. Like other contributors to this symposium, I am well aware of the warnings. Surveillance is "an insidious assault on our freedom."[10] It is "nearly impossible to live today without generating thousands of records about what we watch, read, buy, and do—and the government has easy access to them."[11] Big Brother is watching. We should be afraid.

While these concerns are not without merit, my scholarly interest in the intersection of criminal justice and technology is decidedly different. What interests me is harnessing technology to de-bias and de-racialize policing. As I have written previously, "the possibility that Big Brother will watch us does not have to be frightening. The task is to reimagine Big Brother so that he not only watches us; he also watches over us—to reimagine Big Brother as protective, and as someone who will be there to tell our side of the story."[12]

In two companion articles, I have argued that technology, including access to Big Data, can provide something akin to "doctrinal assists," where Fourth Amendment jurisprudence in particular has proven inadequate to making policing

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[8] For example, Senators Kamala Harris and Rand Paul have introduced a bill to reform bail. *See* Pretrial Integrity and Safety Act of 2017, S. 1593, 115th Cong. (2017).

[9] *See* Kansas v. Hendricks, 521 U.S. 346, 371 (1997) (concluding that a Kansas law allowing for the civil commitment of individuals likely to engage in predatory acts of sexual violence did not violate Hendrick's due process or the Double Jeopardy Clause).

[10] CHRISTOPHER SLOBOGIN, PRIVACY AT RISK: THE NEW GOVERNMENT SURVEILLANCE AND THE FOURTH AMENDMENT ix (2007).

[11] DANIEL J. SOLOVE, NOTHING TO HIDE: THE FALSE TRADEOFF BETWEEN PRIVACY AND SECURITY 2 (2011).

[12] I. Bennett Capers, *Crime, Surveillance, and Communities*, 40 FORDHAM URB. L.J. 959, 989 (2013).

more egalitarian and indeed has likely contributed to race-based policing.[13] More broadly, I have focused on three aspects of policing that seem most intractable and in need of change. These problems are police violence, under-enforcement, and racial profiling. Since police violence against racial minorities, sometimes called "blue-on-black" violence,[14] has become part of the national conversation with the ubiquity of cellphone footage of incidents and the work of the Black Lives Matter movement, I will not say much about that problem here. Nor will I say much about racial profiling, which has also become a well-known issue and, recently, the focus of a successful class-action lawsuit, *Floyd v. City of New York.*[15] I will say a few words about under-enforcement, because it often gets short shrift, or no shrift at all. At the same time communities of color suffer from over-enforcement, they also suffer from its very opposite: under-enforcement. Studies suggest that police are less likely to investigate and prosecute property or violent crimes in communities of color.[16] Studies even show that police departments have slower response times to minority neighborhoods, even when minority neighborhoods and non-minority neighborhoods are equidistant.[17] As Alexandra Natapoff has observed, all of this has the expressive effect of "send[ing] an official message of dismissal and devaluation."[18]

My interventions to date have involved exploring the ways technology can be harnessed to address these problems. Specifically, I have argued that the increased use of public surveillance cameras and facial recognition technology, coupled with access to Big Data and perhaps terahertz scanners capable of distance scanning for firearms, could do much of the work of tackling the third problem I identified— racialized policing. Instead of "young + black + male = probable cause,"[19] the use of these technologies could mean race-blind policing. I wrote:

> Terahertz scanners would tell the police that the bulge in a black teenager's jacket is nothing more than a bulky cellphone, but that white tourist who looks like he is from Texas really does have a gun. Facial recognition technology combined with Big Data would tell the police that the brown driver repeatedly circling the block in fact works in the

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[13]   I. Bennett Capers, *Race, Policing, and Technology*, 95 N.C. L. REV. 1241, 1244 (2017) [hereinafter Capers, *Race, Policing, and Technology*]; Bennett Capers, *Policing, Technology, and Doctrinal Assists*, 69 FLA. L. REV. 723, 723 (2017).

[14]   *See, e.g.*, Devon W. Carbado, *Blue-on-Black Violence: A Provisional Model of Some of the Causes*, 104 GEO. L.J. 1479 (2016).

[15]   959 F. Supp. 2d 540 (S.D.N.Y. 2013).

[16]   Alexandra Natapoff, *Underenforcement*, 75 FORDHAM L. REV. 1715, 1722–31 (2006).

[17]   *See* Colleen Henry, *MPD Report Says South Side 911 Calls Answered Twice as Fast as North Side*, WISN (Nov. 19, 2015, 10:39 PM), http://www.wisn.com/article/mpd-report-says-south-side-911-calls-answered-twice-as-fast-as-north-side/6329541 [https://perma.cc/33HH-AMSU].

[18]   Natapoff, *supra* note 16, at 1749.

[19]   Elizabeth A. Gaynes, *The Urban Criminal Justice System: Where Young + Black + Male = Probable Cause*, 20 FORDHAM URB. L.J. 621 (1993).

neighborhood and is probably looking for a parking space and that the clean-cut white dude reading a paper on a park bench is in fact a sex offender who, just by being near a playground, is violating his sex offender registration. It would tell the police that the black kid running down the street is simply that, a kid running down the street. It would tell them, in a way that is less intrusive or embarrassing, whether someone is a troublemaker casing a neighborhood or a student returning home with a bag of Skittles and an iced tea; a loiterer up to no good, or a father waiting to pick up his children from school; a burglar about to commit a home invasion, or a Harvard professor entering his own home; a thug with a gun, or a police chief; a trespasser attempting to enter the Capitol Building, or a Republican senator; a mugger looking for his next victim, or the future United States Attorney General; a thief about to burgle a laboratory, or the world renowned astrophysicist Neil DeGrasse Tyson, guilty only of "JBB (just being black)." And it would tell that the white kid from New Jersey driving into Harlem is not there to score drugs, but to see his black girlfriend.[20]

The deployment of these technologies would not only likely reduce racialized policing, but they would also address the two other problems I identified—blue-on-black violence and under-enforcement. With respect to blue-on-black violence, the access to terahertz scanners, facial recognition technology, and Big Data could immediately provide officers with information regarding whether a suspect is unarmed, thus obviating the need for deadly force, or whether a suspect has a history of violence or resisting arrest, warranting extra precautions.[21] It could also help with under-enforcement. The fact that cadres of officers would no longer be needed to conduct what Tracey Meares accurately calls "stop-and-frisk as a practice"[22] means that officers would now be free to actually investigate and solve

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[20]   Capers, *Race, Policing, and Technology*, *supra* note 13, at 1277–78 (citations omitted).

[21]   Indeed, mere access to the FBI's national database would tell police, with a click of a button, whether the suspect is a suspected gang member, a suspected terrorist, is believed to be "violent toward law enforcement," or is subject to a protective order. *National Crime Information Center (NCIC)*, FED. BUREAU INVESTIGATION, https://www.fbi.gov/services/cjis/ncic [https://perma.cc/NFP7-JW3D] (last visited Apr. 2, 2018). At the same time, the presence of public surveillance cameras can contribute to what Erik Luna might describe as transparent policing. *See* Erik Luna, *Transparent Policing*, 85 IOWA L. REV. 1107, 1166 (2000). That, in turn, can help educate judges and eventually change constitutional meaning. *See* Jocelyn Simonson, *Copwatching*, 104 CALIF. L. REV. 391, 425, 442–43 (2016).

[22]   Tracey L. Meares, *Programming Errors: Understanding the Constitutionality of Stop-and-Frisk as a Program, Not an Incident*, 82 U. CHI. L. REV. 159, 159 (2015) ("[W]hile the Court in *Terry* authorized police intervention in an individual incident—when the police officer possesses probable cause to believe that an armed individual is involved in a crime—in reality, stop-and-frisk typically is carried out by a police force en masse as a program.").

crimes. We should all be troubled by the fact that one-third of all murders in this country go unsolved.[23]

This brings me to other interventions. If the goal is making policing more transparent, accountable, and egalitarian,[24] what technological innovations might further those goals? Some years ago, Elizabeth Joh explored discretionless policing through the use of automatic traffic tickets based on dedicated short-range communications technology, which allows a host of information concerning a car's speed, registration, and location to be communicated to a third-party.[25] We now also have automated ticketing through red-light cameras. In addition, there exists technology that would allow the police to stop a vehicle remotely using electromagnetic pulses.[26] Recently, students even created a Virtual Ticketing App so that a police officer could remain in his vehicle during traffic stops.[27] Might these technologies—when coupled with access to Big Data—lead to a reduction in pretextual stops, especially given the overwhelming evidence that such stops are laden with racial and class biases[28] and may in fact *increase* crime?[29] Here is

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[23]   *See, e.g.*, FED. BUREAU OF INVESTIGATION, UNIFORM CRIME REPORT, CRIME IN THE UNITED STATES, 2012: OFFENSES CLEARED (2013), https://ucr.fbi.gov/crime-in-the-u.s/2012/crime-in-the-u.s.-2012/offenses-known-to-law-enforcement/clearancetopic.pdf [https://perma.cc/QG6H-STMF]; *see also* Martin Kaste, *Open Cases: Why One-Third of Murders in America Go Unresolved*, NPR (Mar. 30, 2015, 5:04 AM), http://www.npr.org/2015/03/30/395069137/open-cases-why-one-third-of-murders-in-america-go-unresolved [https://perma.cc/64QX-BW3W]; *Getting Away with Murder*, ECONOMIST (July 4, 2015), http://www.economist.com/news/united-states/21656725-police-fail-make-arrest-more-third-nations-killings-getting-away [https://perma.cc/LF2C-223X].

[24]   These three goals bring to mind Stephen Henderson's Rule Five in his discussion of Big Data Rules. *See* Stephen E. Henderson, *A Few Criminal Justice Big Data Rules*, 15 OHIO ST. J. CRIM. L. 527 (2018). It also brings to mind his Rule One, which channels a 1965 Presidential Commission to urge that we "begin not with technology but with problems." *Id.* at 532 (citing PRESIDENT'S COMM'N ON LAW ENF'T & ADMIN. OF JUSTICE, THE CHALLENGE OF CRIME IN A FREE SOCIETY 246 (1967)).

[25]   Elizabeth E. Joh, *Discretionless Policing: Technology and the Fourth Amendment*, 95 CALIF. L. REV. 199, 199–200 (2007).

[26]   Victoria Woollaston, *End of the High-Speed Car Chase? Engineers Invent System That Disables a Vehicle's Engine Remotely Using Radio Beams*, DAILY MAIL (Dec. 4, 2013, 4:34 PM), http://www.dailymail.co.uk/sciencetech/article-2518177/RF-Safe-Stop-disables-vehicles-engine-remotely-using-radio-beams.html [https://perma.cc/5D6R-3XXK]; Bruno Waterfield & Matthew Day, *EU Has Secret Plan for Police to 'Remote Stop' Cars*, TELEGRAPH (Jan. 29, 2014, 9:50 PM), http://www.telegraph.co.uk/news/worldnews/europe/eu/10605328/EU-has-secret-plan-for-police-to-remote-stop-cars.html [https://perma.cc/LJ7R-8QWF].

[27]   Steve Orlando, *App Aims to Take the Risk Out of Routine Traffic Stops*, UF NEWS (Apr. 17, 2017), http://news.ufl.edu/articles/2017/04/app-aims-to-take-the-risk-out-of-routine-traffic-stops.php [https://perma.cc/69RL-K9XS].

[28]   Indeed, a recent analysis of audio from police stops shows that police officers speak differently when stopping whites than when stopping blacks. *See* Rob Voigt et al., *Language from Police Body Camera Footage Shows Racial Disparities in Officer Respect*, 114 PROC. NAT'L ACAD. SCI. 6521 (2017), http://www.pnas.org/content/114/25/6521 [https://perma.cc/2CMD-2J6K].

[29]   I. Bennett Capers, *Crime, Legitimacy, and Testilying*, 83 IND. L.J. 835, 865 (2008).

another question: are there technologies that can create *smarter* smart guns[30] (i.e., firearms that will automatically disengage and require additional steps before they can be reengaged) for when officers confront individuals who, based on known information from Big Data, are unlikely to pose any serious threat?

Or more ambitiously, returning to the discussion of microchips, how might the availability of microchips coupled with access to Big Data assist in de-racializing and de-biasing policing? At this point, more and more jurisdictions are requiring citizens to identify themselves if asked,[31] and the Court has given its imprimatur to stop-and-identify statutes.[32] Given this state of affairs, might there be advantages to a system in which we are all knowable from afar, and in which, to borrow from Andrew Ferguson, "unknown suspects can be known—not simply identified by name, but revealed through a web of facts involving criminal records, personal history, and past location data"?[33] It certainly seems preferable to the current state of affairs, where "[s]kin color becomes evidence,"[34] where too often "young + black + male = probable cause,"[35] where there continues to be a "racial tax"[36] at odds with our ambition of equality before the law at both gatehouses and mansions,[37] and where "'unequal *public* privacy'" is the norm, with those who are privileged by race and class enjoying a relative surfeit.[38] And if inserted microchips seem too dystopian—too much like *Clockwork Orange*, if not *1984*— could many of the same advantages be obtained with the microchips we already carry, albeit in smartphones?

This is not to suggest that new technologies are risk-free. There is the concern that technology may replicate and entrench existing inequalities; even the evidence about the current state of facial recognition technology is troubling.[39]

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[30]   Smart guns, which use technology to prevent anyone but the registered owner from using the gun, are already on the market. *See 5 Things to Know About Smart Guns*, POLICEONE (Aug. 3, 2017), https://www.policeone.com/police-products/firearms/articles/391099006-5-things-to-know-about-smart-guns/ [https://perma.cc/EK36-3BBE]. There is also technology that allows a firearm to be remotely disengaged. *See* Martha Mendoza, *With High-Tech Guns, Users Could Disable Remotely*, WASH. TIMES (May 21, 2013), http://www.washingtontimes.com/news/2013/may/21/high-tech-guns-users-could-disable-remotely/ [https://perma.cc/CL3U-WXM6].

[31]   *See, e.g.*, OHIO REV. CODE § 2921.29 (2006); IND. CODE § 34-28-5-3.5 (2016).

[32]   Hiibel v. Sixth Jud. Dist. Ct. of Nev., Humboldt Cty., 542 U.S. 177, 191 (2004).

[33]   Andrew Guthrie Ferguson, *Big Data and Predictive Reasonable Suspicion*, 163 U. PA. L. REV. 327, 351 (2015) (footnote omitted).

[34]   David A. Harris, *The Stories, the Statistics, and the Law: Why "Driving While Black" Matters*, 84 MINN. L. REV. 265, 268 (1999).

[35]   Gaynes, *supra* note 19.

[36]   RANDALL KENNEDY, RACE, CRIME, AND THE LAW 159 (1997).

[37]   The reference is, of course, to Yale Kamisar's important essay. Yale Kamisar, *Equal Justice in the Gatehouses and Mansions of American Criminal Procedure: From* Powell *to* Gideon, *from* Escobedo *to . . .*, *in* CRIMINAL JUSTICE IN OUR TIME 1, 19 (A. E. Dick Howard ed., 1965).

[38]   Capers, *Race, Policing, and Technology*, *supra* note 13, at 1290.

[39]   We know that current facial recognition software may reflect some of the biases of their designers. For example, we know that facial recognition software designed in China, Japan, and

Andrew Ferguson discusses some of this path dependence with respect to predictive policing in his contribution to this symposium.[40] In the past, I have addressed this concern with the hope that racial audits and data trails can do much of this work.[41] Is that enough? And as Ric Simmons has asked, how do we ensure procedural legitimacy?[42] These are not the only questions. Given the practice in many jurisdictions of policing through bench warrants—for everything from failing to pay traffic tickets to biking on the sidewalk, for example—how do we ensure police do not use access to information about bench warrants pretextually?[43] How do we remain vigilant against the banality of surveillance? More recently, I have worried about the ways we become indoctrinated into assisting the police,[44] which might translate into citizens "voluntarily" embracing the use of chips, Big Data, and other new technologies. Did I mention that Three Square Market performed the implants during a "chip party"?[45]

But my larger issue, which I end with, is this. Some years ago, Justice Stevens observed that the Court, rather than standing up for individual rights and the rights of minorities, had become a "loyal foot soldier" of the police.[46] (It is telling that the Chief Justice at the time, Rehnquist, had in his youth complained

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Korea is better at recognizing East Asian faces than white faces. At the same time, software designed in the United States seems better at recognizing white faces than black faces. *See* Clare Garvie & Jonathan Frankle, *Facial-Recognition Software Might Have a Racial Bias Problem*, ATLANTIC (Apr. 7, 2016), https://www.theatlantic.com/technology/archive/2016/04/the-underlying-bias-of-facial-recognition-systems/476991/ [https://perma.cc/4L5J-AXR4]. The hope is that the "bugs" will be eliminated over time.

[40] *See* Andrew Guthrie Ferguson, *Illuminating Black Data Policing*, 15 OHIO ST. J. CRIM. L. 503 (2018).

[41] Capers, *Race, Policing, and Technology*, *supra* note 13, at 1276 n.215 (citing R. A. Lenhardt, *Race Audits*, 62 HASTINGS L.J. 1527, 1544–50 (2011); Jessica Erickson, *Racial Impact Statements: Considering the Consequences of Racial Disproportionalities in the Criminal Justice System*, 89 WASH. L. REV. 1425, 1455–56 (2014)).

[42] *See* Ric Simmons, *Big Data and Procedural Justice: Legitimizing Algorithms in the Criminal Justice System*, 15 OHIO ST. J. CRIM. L. 573 (2018).

[43] For example, New York City currently has about 1.4 million open warrants for citizens stemming from quality of life offenses like walking a dog without a leash and being in a park after closing hours. *See How NYC Is Tackling 1.4 Million Open Arrest Warrants for 'Quality-of-Life' Crimes*, PBS NEWSHOUR (Jan. 16, 2016, 4:29 PM), http://www.pbs.org/newshour/bb/how-nyc-is-tackling-1-4-million-open-arrest-warrants-for-quality-of-life-crimes/ [https://perma.cc/UP3H-QU53].

[44] I. Bennett Capers, *Criminal Procedure and the Good Citizen*, 118 COLUM. L. REV. 653 (2018).

[45] Jeff Baenen, *Wisconsin Company Holds 'Chip Party' to Microchip Workers*, CHI. TRIB. (Aug. 2, 2017, 7:32 AM), http://www.chicagotribune.com/bluesky/technology/ct-wisconsin-company-microchips-workers-20170801-story.html [https://perma.cc/453W-8G4E].

[46] California v. Acevedo, 500 U.S. 565, 601 (1991) (Stevens, J., dissenting) ("No impartial observer could criticize this Court for hindering the progress of the war on drugs. On the contrary, decisions like the one the Court makes today will support the conclusion that this Court has become a loyal foot soldier in the Executive's fight against crime.").

that "ivory tower jurisprudence . . . has weakened local law enforcement."[47] Clearly, under the law-and-order Rehnquist Court, there was a new sheriff/justice in town.) My question is—as scholars and activists, as progressives committed to reforming criminal justice, as citizens who want to take Chief Justice Roberts at his word when he says "[t]he way to stop discrimination on the basis of race is to stop discriminating on the basis of race"[48]—how do we enlist the Court in this project of "mak[ing] America what America must become"[49]: "fair, egalitarian, responsive to needs of all of its citizens, and truly democratic in all respects, including its policing"?[50] How do we urge the Court to become a "loyal foot soldier" again, but this time for the people? Instead of technologies that are designed solely with policing in mind, how do we enlist the Court in facilitating the deployment of technologies that help us? And how do we impress upon the Court, every time a Fourth Amendment issue is decided, the importance of recalling who it is the Fourth Amendment protects? It is there in the opening words: "the people."[51]

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[47] *See* David G. Savage, *Rehnquist Wins Confession Battle: Law: For Years, the Chief Justice Had Fought Rule That Said Forced Admissions of Guilt Reversed Convictions. His 'Harmless Error' Standard Now Applies.*, L.A. TIMES (Mar. 30, 1991), http://articles.latimes.com/1991-03-30/news/mn-854_1_harmless-error [https://perma.cc/A767-3VBT]. In a 1952 memo Rehnquist wrote as a law clerk to Justice Robert Jackson, Rehnquist wrote: "[D]efendants who are as 'guilty as sin' should not go free simply because of a 'technical' mistake by prosecutors or police. 'The ivory tower jurisprudence . . . has weakened local law enforcement.'" *Id.* He concluded the memo by stating: "Let's hope it [will] come to an end." *Id.*

[48] Parents Involved in Cmty. Sch. v. Seattle Sch. Dist. No. 1, 551 U.S. 701, 748 (2007).

[49] JAMES BALDWIN, THE FIRE NEXT TIME 10 (Vintage Int'l 1993) (1963) ("[G]reat men have done great things here, and will again, and we can make America what America must become.").

[50] Capers, *supra* note 29, at 880.

[51] U.S. CONST. amend. IV.